UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TEXAS 75202-2733

MEMORANDUM

DATE: November 5, 2018

SUBJECT: Documentation of Approval of an After-Action Report at the Goodrich Asbestos Site in Miami, Oklahoma

FROM: Randy Guidry, On-Scene Coordinator
Emergency Readiness Section (6SF-ER)

TO: File

I. PURPOSE

This memorandum documents the approval for a Response Action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. §§9601 et seq., at the Goodrich Asbestos Site ("Site"), located in Miami, Oklahoma. The action included the securing of the power house building and repairs to the fences surrounding the perimeter of the facility. The site is located near a Head Start school, elementary school, middle school, and residential neighborhoods.

This action was initiated using the delegation of authority Chapter 14, Number 2, CERCLA Response, and subsequent Region 6 delegation for On-Scene Coordinator authority to approve responses up to $250,000 for emergency situations.

This action meets the criteria for initiating a response action under the National Contingency Plan (NCP), 40 CFR §300.415. This action required less than twelve months and $2,000,000 to complete.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS # OKN000605314
Category of Response: Classic Emergency
Site ID #A6MK
Latitude: 36.8891796 Longitude: -94. 8892537

A. Site Description

The site is a former B.F. Goodrich tire plant in Miami, Oklahoma. The plant ceased operations in 1986, and ownership of the property later transferred to the Blakeney Company. Due to the presence of asbestos in multiple structures on the site, abatement and removal of the asbestos was required by ODEQ. Some initial attempts to abate/remove the asbestos was conducted by Blakeney however, cleanup work ceased in late 2014. The site has been abandoned and has been broken in to several times. The Oklahoma Department of Environmental Quality (ODEQ) called EPA Region 6, requesting assistance with the securing of the structure to prevent further entry to the building and to repair holes in the perimeter fence. OSC Randy Guidry, EPA's START contractor, and EPA's ERRS contractor deployed to the site on Oct 23, 2018.

1. Physical Location

The site is in the city of Miami, Oklahoma which is in the northeast corner of the State of Oklahoma close to the point where the borders of Kansas, Missouri and Oklahoma come together. The physical address is 1000 Goodrich Blvd, Miami, Oklahoma. The site is located on the west side of the city of Miami which is located in Ottawa County, Oklahoma.

2. Site Characteristics

The area surrounding the site is predominantly residential neighborhoods that are located immediately adjacent to the facility on the south and east sides. A Head Start school, elementary school, and middle school are all located a few hundred feet east of the eastern fence line of the facility.

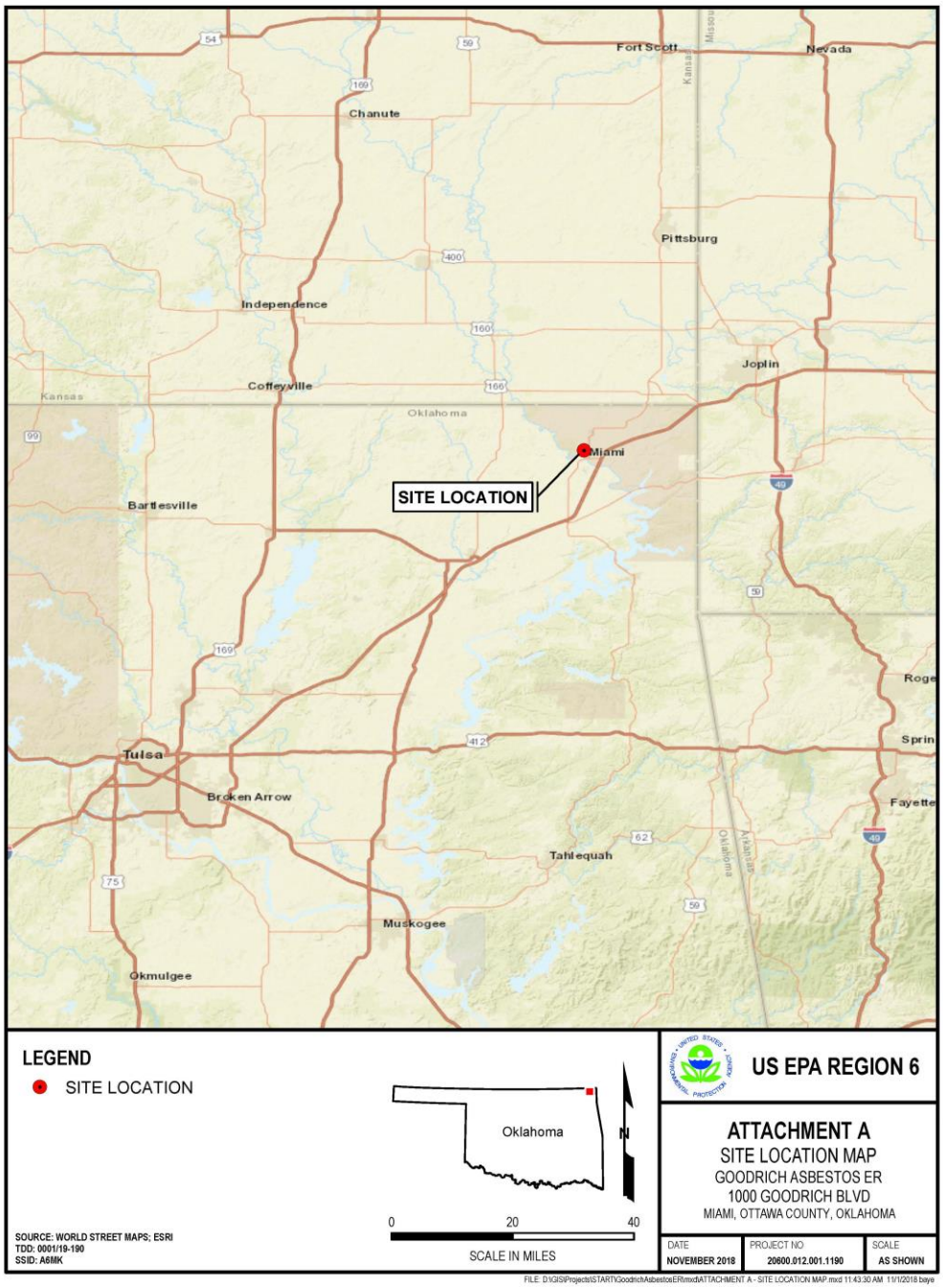
3. Release or threat of a release into the environment of a hazardous substance, pollutant or contaminant

ODEQ conducted additional sampling of piles of demolition debris left on the property the week of October 8, 2018. The results of the sampling show elevated levels of asbestos, primarily chrysotile, in many of the debris piles. The former Powerhouse Building located on the north side of the property, which also contains varying amounts of asbestos containing material, has recently been broken into by trespassers. ODEQ asked for EPA's assistance in securing the Powerhouse Building to prevent future break-ins and to fix the perimeter fence where locals have cut open the fence to gain access to the property. ODEQ has also requested EPA conduct a full removal assessment of the debris piles and conduct an asbestos survey inside the Powerhouse Building. This assessment is scheduled for November 2018.
Pictures:

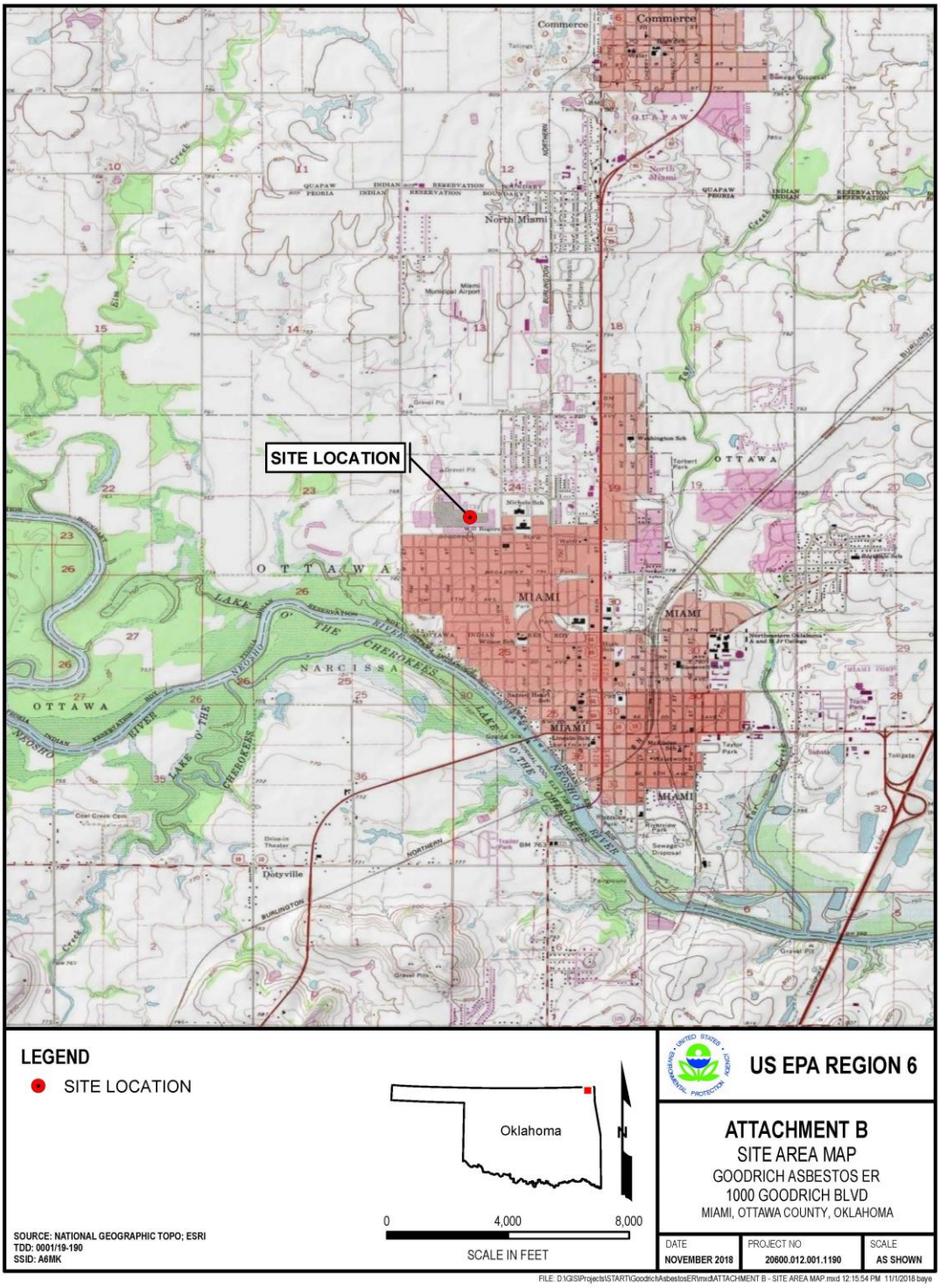
4. NPL Status

The Site is not on the NPL.

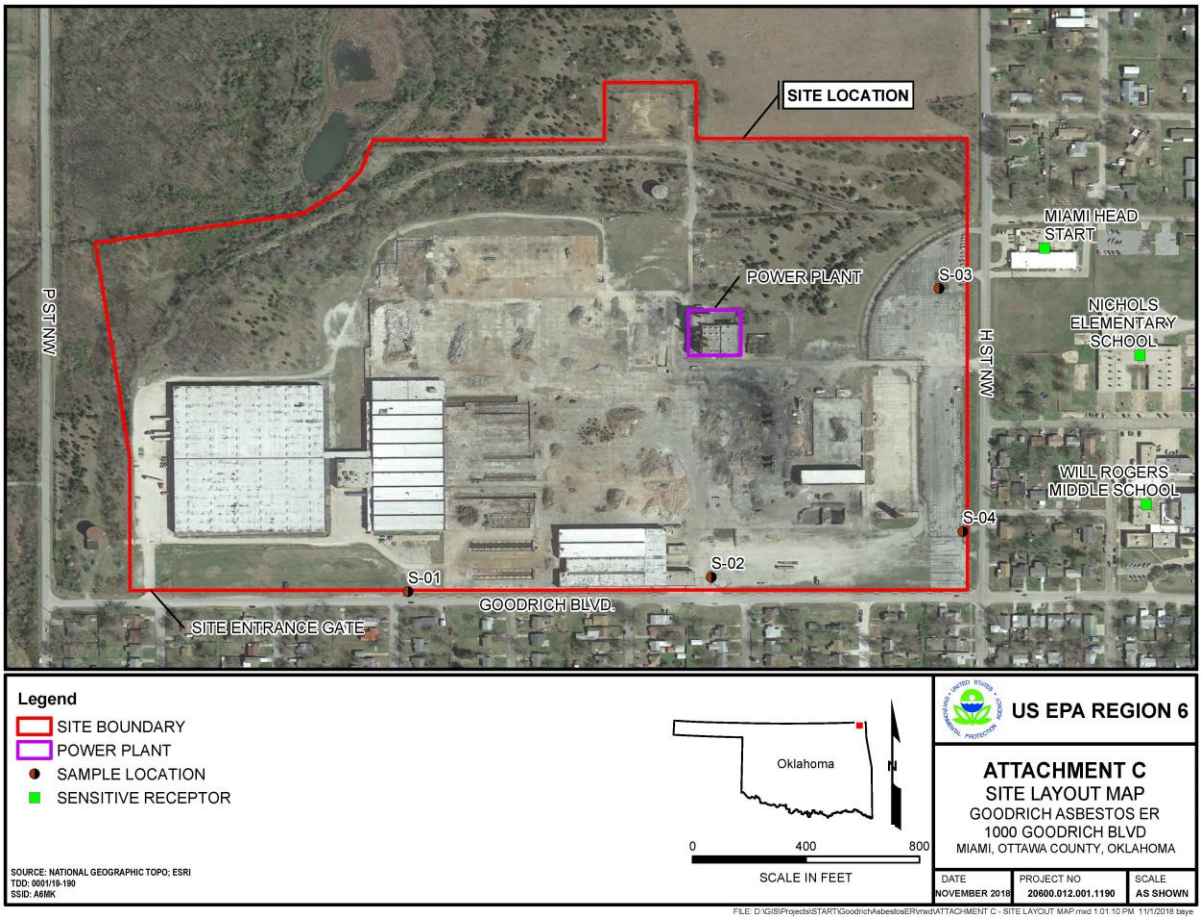
5. Maps, Pictures and other graphic representations



Location of Miami. Oklahoma



View of the city on Miami, Oklahoma



View of the BF Goodrich Plant

View of Power House building

View of one area of damaged perimeter fence

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

The conditions at the Site met the following factors which indicate that the Site is a threat to the public health, welfare and the environment and a removal action is appropriate under Section 300.415(b)(2) of the National Contingency Plan. Any or all of these factors may be present at the Site yet any one of these factors may determine the appropriateness of a removal action.

1. Actual or Potential Exposure to Nearby Populations, Animals, or the Food Chain from Hazardous Substance or Pollutants or contaminants. NCP Section 300.415(b)(2)(i)

Asbestos, which is a hazardous material, could be released from openings in the power house building into the air. Trespassers who have gained access to the building could come into contact with asbestos in the power house building and the debris piles scattered around the site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances, pollutants or contaminants from this Site, if not addressed by implementing the response action in this Action Memorandum, may present an imminent and substantial endangerment to the public health, welfare, or the environment.

V. ACTIONS AND ESTIMATED COSTS

A. Actions Taken

Action Description

On October 23, 2018, the EPA team arrived on site and met with ODEQ. ODEQ pointed out that the green shipping container located behind the "Powerhouse Building" were open, and the locks were missing. The EPA team and ODEQ noticed the contents of the container, which were filled with black trash bags, appears to be piping insulation and were suspect asbestos material. The EPA team closed the doors and secured the container with pad locks.

The EPA team then began a visual inspection of the "Powerhouse Building." The building appeared to contain a large amount of suspect asbestos material including, but not limited to pipe insulation, transite panels and insulation on some structures. Free phase oil and oil stains were found on the floor of the building near one of the boilers. It was also observed that the "basement" of the building was flooded with an unknown liquid (contaminated water with an oily sheen and possible other contaminates in it.) The visual inspection of the "Oven" building and historical information given by the state led EPA team to conclude that there appeared to be a small amount of suspect asbestos material. The "Oven" building was also showing signs of structural weakness, with parts of the walls collapsed.

ODEQ showed the EPA team the basements that were covered with sheet metal where the "Autoclave" building used to be. ODEQ believes the basement was lined with asbestos. While continuing the site walk, ODEQ and the EPA team visually observed a pipe in the NW corner of the concrete pad that was continuously leaking water.

Upon visual inspection of the debris piles, the EPA team found suspect asbestos containing material in all the visually observed piles. Suspect asbestos material include 9x9 tiles, mastic, roofing, and other material. The EPA team also conducted a pile volume estimation by measuring the height and the outline of two of the debris piles.

On October 24, 2018, the EPA team finished securing the "Powerhouse" building by boarding-up the large doors with plywood and two by four studs. The small door was secured by screwing wood panels on the openings. The EPA team also competed the repairs on the perimeter fence. After securing the power house building and repairing the fence the EPA team placed new locks on the main gate, Powerhouse building, and the Conex container and then demobilized from the site.

Contribution to remedial performance

ODEQ has requested EPA conduct a full removal assessment of the debris piles and conduct an asbestos survey inside the Powerhouse Building. This assessment is planned for mid-November 2018.

Description of alternative technologies

There are no reasonable alternatives to securing the building and repairing the fence.

Applicable or relevant and appropriate requirements (ARAR)

This response action was conducted to eliminate the actual or potential exposure to hazardous substance, pollutant or contaminant to the environment, pursuant to CERCLA, 42 U.S.C. §9601 et seq., and in a manner consistent with the National Contingency Plan (NCP), 40 CFR Part 300, as required at 33 U.S.C. §1321(c)(2) and 42 U.S.C. §9605. Pursuant to 40 CFR Part 300.415(j), fund-financed removal actions under CERCLA §104 and removal actions pursuant to CERCLA §106 shall, to the extent practicable considering the exigencies of the situation, attain the applicable or relevant and appropriate requirements under Federal environmental law.

B. Estimated Costs

Extramural Costs

Cleanup Contractor (ERRS) (estimated)..... $6,000.00
START (estimated)..... $ 6,300.00

TOTAL ESTIMATED COST..... $12,300.00

EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If this emergency response had not been taken access to known areas of asbestos contamination would continue.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

ENFORCEMENT

The total cost for this response action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be $28,388.37

(Direct Cost) + (Other Indirect Costs) + 47.09%(Direct + Indirect Costs) =Estimated EPA Cost

$12,300.00 + $7,000.00 + 0.4709($12,300.00 + $7,000) = $28,388.37

Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rated expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2002. The estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a response action. The estimates are for illustrative purposes only, and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor the deviation of actual total costs from this estimate will affect the United States' right to cost recover.

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Attachment 1: ATSDR Tox FAQs for Asbestos

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

ASBESTOS
CAS # 1332-21-4

Division of Toxicology ToxFAQs™ **September 2001**

This fact sheet answers the most frequently asked health questions (FAQs) about asbestos. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, individual susceptibility and personal habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to asbestos usually occurs by breathing contaminated air in workplaces that make or use asbestos. Asbestos is also found in the air of buildings that are being torn down or renovated. Asbestos exposure can cause serious lung problems and cancer. This substance has been found at 83 of the 1,585 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is asbestos?

Asbestos is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of tremolite, actinolite, and anthophyllite) that occur naturally in the environment. Asbestos minerals have separable long fibers that are strong and flexible enough to be spun and woven and are heat resistant. Because of these characteristics, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings. Some vermiculite or talc products products may contain asbestos.

What happens to asbestos when it enters the environment?

Asbestos fibers can enter the air or water from the breakdown of natural deposits and manufactured asbestos products. Asbestos fibers do not evaporate into air or dissolve in water. Small diameter fibers and particles may remain suspended in the air for a long time and be carried long distances by wind or water before settling down. Larger diameter fibers and particles tend to settle more quickly.

Asbestos fibers are not able to move through soil. Asbestos fibers are generally not broken down to other compounds and will remain virtually unchanged over long periods.

How might I be exposed to asbestos?

We are all exposed to low levels of asbestos in the air we breathe. These levels range from 0.00001 to 0.0001 fibers per milliliter of air and generally are highest in cities and industrial areas.

People working in industries that make or use asbestos products or who are involved in asbestos mining may be exposed to high levels of asbestos. People living near these industries may also be exposed to high levels of asbestos in air.

Asbestos fibers may be released into the air by the disturbance of asbestos-containing material during product use, demolition work, building or home maintenance, repair, and remodeling. In general, exposure may occur only when the asbestos-containing material is disturbed in some way to release particles and fibers into the air.

Drinking water may contain asbestos from natural sources or from asbestos-containing cement pipes.

How can asbestos affect my health?

Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung. This disease is called asbestosis and is usually found in workers exposed to asbestos, but not in the general public. People with asbestosis have difficulty breathing, often a cough, and in severe cases heart enlargement. Asbestosis is a serious disease and can eventually lead to disability and death.

Breathing lower levels of asbestos may result in changes called plaques in the pleural membranes. Pleural plaques can occur in workers and sometimes in people living in areas with high environmental levels of asbestos. Effects on breathing from pleural plaques alone are not usually serious, but higher exposure can lead to a thickening of the pleural membrane that may restrict breathing.

How likely is asbestos to cause cancer?

The Department of Health and Human Services (DHHS), the World Health Organization (WHO), and the EPA have determined that asbestos is a human carcinogen.

It is known that breathing asbestos can increase the risk of cancer in people. There are two types of cancer caused by exposure to asbestos: lung cancer and mesothelioma. Mesothelioma is a cancer of the thin lining surrounding the lung (pleural membrane) or abdominal cavity (the peritoneum). Cancer from asbestos does not develop immediately, but shows up after a number of years. Studies of workers also suggest that breathing asbestos can increase chances of getting cancer in other parts of the body (stomach, intestines, esophagus, pancreas, and kidneys), but this is less certain. Early identification and treatment of any cancer can increase an individual's quality of life and survival.

Cigarette smoke and asbestos together significantly increase your chances of getting lung cancer. Therefore, if you have been exposed to asbestos you should stop smoking. This may be the most important action that you can take to improve your health and decrease your risk of cancer.

How can asbestos affect children?

We do not know if exposure to asbestos will result in birth defects or other developmental effects in people. Birth defects have not been observed in animals exposed to asbestos.

It is likely that health effects seen in children exposed to high levels of asbestos will be similar to the effects seen in adults.

How can families reduce the risk of exposure to asbestos?

Materials containing asbestos that are not disturbed or deteriorated do not, in general, pose a health risk and can be left alone. If you suspect that you may be exposed to asbestos in your home, contact your state or local health department or the regional offices of EPA to find out how to test your home and how to locate a company that is trained to remove or contain the fibers.

Is there a medical test to show whether I've been exposed to asbestos?

Low levels of asbestos fibers can be measured in urine, feces, mucus, or lung washings of the general public. Higher than average levels of asbestos fibers in tissue can confirm exposure but not determine whether you will experience any health effects.

A thorough history, physical exam, and diagnostic tests are needed to evaluate asbestos-related disease. Chest x-rays are the best screening tool to identify lung changes resulting from asbestos exposure. Lung function tests and CAT scans also assist in the diagnosis of asbestos-related disease.

Has the federal government made recommendations to protect human health?

In 1989, EPA banned all new uses of asbestos; uses established before this date are still allowed. EPA established regulations that require school systems to inspect for damaged asbestos and to eliminate or reduce the exposure by removing the asbestos or by covering it up. EPA regulates the release of asbestos from factories and during building demolition or renovation to prevent asbestos from getting into the environment.

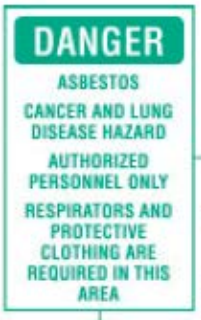
EPA has proposed a concentration limit of 7 million fibers per liter of drinking water for long fibers (lengths greater than or equal to 5 μm). The Occupational Safety and Health Administration has set limits of 100,000 fibers with lengths greater than or equal to 5 μm per cubic meter of workplace air for 8-hour shifts and 40-hour work weeks.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2001. Toxicological Profile for Asbestos. Update. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs™ Internet address is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Attachment 2: OSHA Fact Sheet on Asbestos



OSHA FACT Sheet

Asbestos

What is asbestos?

Asbestos is the name given to a group of naturally occurring minerals used in certain products, such as building materials and vehicle brakes, to resist heat and corrosion. Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these materials that have been chemically treated and/or altered.

What are the dangers of asbestos exposure to workers?

The inhalation of asbestos fibers by workers can cause serious diseases of the lungs and other organs that may not appear until years after the exposure has occurred. For instance, asbestosis can cause a buildup of scar-like tissue in the lungs and result in loss of lung function that often progresses to disability and death. Asbestos fibers associated with these health risks are too small to be seen with the naked eye, and smokers are at higher risk of developing some asbestos-related diseases.

Are you being exposed to asbestos?

General industry employees may be exposed to asbestos during the manufacture of asbestos-containing products or when performing brake and clutch repairs. In the construction industry, exposure occurs when workers disturb asbestos-containing materials during the renovation or demolition of buildings. Employees in the maritime environment also may be exposed when renovating or demolishing ships constructed with asbestos-containing materials. In addition, custodial workers may be exposed through contact with deteriorating asbestos-containing materials in buildings.

Are there any OSHA standards that cover workers exposed to asbestos?

Yes. The Occupational Safety and Health Administration (OSHA) has the following three standards to protect workers from exposure to asbestos in the workplace:

- 29 *CFR* 1926.1101 covers construction work, including alteration, repair, renovation, and demolition of structures containing asbestos.
- 29 *CFR* 1915.1001 covers asbestos exposure during work in shipyards.
- 29 *CFR* 1910.1001 applies to asbestos exposure in general industry, such as exposure during brake and clutch repair, custodial work, and manufacture of asbestos-containing products.

The standards for the construction and shipyard industries classify the hazards of asbestos work activities and prescribe particular requirements for each classification:

- **Class I** is the most potentially hazardous class of asbestos jobs and involves the removal of thermal system insulation and sprayed-on or troweled-on surfacing asbestos-containing materials or presumed asbestos-containing materials.
- **Class II** includes the removal of other types of asbestos-containing materials that are not thermal system insulation, such as resilient flooring and roofing materials containing asbestos.
- **Class III** focuses on repair and maintenance operations where asbestos-containing or presumed asbestos-containing materials are disturbed.
- **Class IV** pertains to custodial activities where employees clean up asbestos-containing waste and debris.

There are equivalent regulations in states with OSHA-approved state plans.

What are the permissible exposure limits for asbestos?

Employee exposure to asbestos must not exceed 0.1 fiber per cubic centimeter (f/cc) of air, averaged over an 8-hour work shift. Short-term exposure must also be limited to not more than 1 f/cc, averaged over 30 minutes. Rotation of employees to achieve compliance with either permissible exposure limit (PEL) is prohibited.

Are employers required to conduct exposure monitoring?

In construction and shipyard work, unless you are able to demonstrate that employee exposures will be below the PELs (a "negative exposure assessment"), you are generally required to conduct daily monitoring for workers in Class I and II regulated areas. For workers in other operations where exposures are expected to exceed one of the PELs, you must conduct periodic monitoring. In general industry, you must perform initial monitoring for workers who may be exposed above a PEL or above the excursion limit. You must conduct subsequent monitoring at reasonable intervals, and in no case at intervals greater than 6 months for employees exposed above a PEL.

Must employers create regulated areas?

You must create controlled zones known as regulated areas that are designed to protect employees where certain work with asbestos is performed. You must limit access to regulated areas to authorized persons who are wearing appropriate respiratory protection. You must also prohibit eating, smoking, drinking, chewing tobacco or gum, and applying cosmetics in these areas. You must display warning signs at each regulated area. In construction and shipyards, workers must perform Class I, II, and III asbestos work (and all other

Asbestos

operations where asbestos concentrations may exceed a PEL) within regulated areas. In general industry, you must establish regulated areas wherever asbestos concentrations may exceed a PEL.

What compliance methods must employers use to control exposures?

You must control exposures to or below the PELs using engineering controls and work practices to the extent feasible. Where feasible engineering controls and work practices do not ensure worker protection at the exposure limits, you must reduce employee exposures to the lowest levels achievable and then supplement them with respiratory protection to meet the PELs. In construction and shipyards, each work classification has specific control method requirements. In general industry, specific controls are prescribed for brake and clutch repair work. For example, you must prohibit certain practices, such as the use of compressed air, to remove asbestos.

When are employers required to provide respiratory protection for workers?

You must provide and ensure the use of respirators when a PEL is exceeded. In construction and shipyards, you must require workers to use respirators when performing certain work. Generally, the level of exposure determines the type of respirator needed. In addition, the standards specify the type of respirator to be used for certain asbestos work. (See *CFR* 1910.134.) Employees must get respirator training and medical clearance to use respirators.

Are employers required to provide protective clothing for workers?

Yes. For any employee exposed to airborne concentrations of asbestos that exceed a PEL, you must provide and require the use of protective clothing such as coveralls or similar full-body clothing, head coverings, gloves, and foot coverings. You must provide face shields, vented goggles, or other appropriate protective equipment wherever the possibility of eye irritation exists and require workers to wear them.

Must employers provide hygiene facilities?

Yes. You must establish decontamination areas and hygiene practices for employees exposed above a PEL. In addition, employees may not smoke in work areas that might expose them to asbestos.

Do OSHA standards require employers to provide training?

Yes. In construction and shipyards, you must provide training for employees exposed above a PEL and for employees involved in each identified work classification. The specific training requirements depend upon the particular class of work being performed. In general industry, you must provide training to all employees exposed above a PEL. You must also provide asbestos awareness training to employees who perform housekeeping operations covered by the standard. You must place warning labels on all asbestos products, containers, and installed construction materials when feasible.

What are employers required to provide concerning medical examinations?

In construction and shipyards, you must provide medical examinations for workers who, for 30 or more days per year, engage in Class I, II, or III work or experience exposure above a PEL. In general industry, you must provide medical examinations for workers who are exposed above a PEL.

What are the recordkeeping requirements for asbestos exposures?

You must keep accurate records of the following:

- All measurements taken to monitor employee exposure to asbestos—30 years;
- Medical records, including physician's written opinions—duration of the employee's employment plus 30 years; and
- Training records—1 year beyond the last date of employment.

How can you get more information on safety and health?

OSHA has various publications, standards, technical assistance, and compliance tools to help you, and offers extensive assistance through workplace consultation, voluntary protection programs, grants, strategic partnerships, state plans, training, and education. OSHA's *Safety and Health Program Management Guidelines* (*Federal Register* 54:3904-3916, January 26, 1989) detail elements critical to the development of a successful safety and health management system. This and other information are available on OSHA's website.

- For one free copy of OSHA publications, send a self-addressed mailing label to OSHA Publications Office, P.O. Box 37535, Washington, DC 20013-7535; or send a request to our fax at (202) 693-2498, or call us at (202) 693-1888.
- To order OSHA publications online at **www.osha.gov**, go to **Publications** and follow the instructions for ordering.
- To file a complaint by phone, report an emergency, or get OSHA advice, assistance, or products, contact your nearest OSHA office under the "U.S. Department of Labor" listing in your phone book, or call toll-free at **(800) 321-OSHA (6742)**. The teletypewriter (TTY) number is (877) 889-5627.
- To file a complaint online or obtain more information on OSHA federal and state programs, visit OSHA's website.

U.S. Department of Labor
Occupational Safety and Health Administration
2002